

R wherein E is the distance from center of rotary table to first hook and R is the radius on the first hook holding key.

4. The method of Claim 1 wherein said trigonometric analysis of the required curvatures of the surfaces determines the path of said cutter as a curved convex radius of E plus R wherein E + R of the convex radius is determined by points L, C, and A, L being the minimum distance P and distance M determined by angle  $+Q^\circ$ , the angle of rotation to the left, C being the minimum distance E determined by the angle  $0^\circ$ ; A being the minimum distance F and distance Y determined by angle  $-Q^\circ$ , the angle of rotation to the right.

Abstract

A method of determining machining instructions during machining of a workpiece using a machine having a cutter, the surfaces of the workpiece being defined by a plurality of programmed instructions obtained by trigonometric analysis of the required curvatures of the surfaces.